

DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER) BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY PRODUCT CONTROL SECTION 11805 SW 26 Street, Room 208

Miami, Florida 33175-2474 T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/economy

Continental Glass Systems, Inc. 325 West 74 Place Hialeah, FL 33014

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER-Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code. This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Metro Screws Concrete and Masonry Anchor

APPROVAL DOCUMENT: Drawing No. 14-2072, titled "Metro Screw Concrete Anchor Evaluation", sheet 1 of 1, dated 12/05/2014, prepared by Engineering Express, signed and sealed by Frank L. Bennardo, P.E., bearing the Miami-Dade County Product Control approval stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: None

LABELING: Each box shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved or MDCPCA", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official. This NOA consists of this page 1, evidence page E-1, as well as approval document mentioned above.

The submitted documentation was reviewed by Carlos M. Utrera, P.E.

MIAMI-DADE COUNTY
APPROVED

104/15/2015

NOA No: 15-0209.06 Expiration Date: April 23, 2020 Approval Date: April 23, 2015

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NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. 14-2072, titled "Metro Screws Concrete and Masonry Anchor", sheet 1 of 1, dated 12/05/2014, prepared by Engineering Express, signed and sealed by Frank L. Bennardo, P.E.

B. TESTS

- 1. Test report on Tension and Shear Load for 5/16" Hex Drive Concrete Screws per ASTM E 488, prepared by Blackwater Testing, Inc., Test Report No. BT-CON-14-009A, dated 10/02/2014, signed and sealed by Yamil G. Kuri, P.E.
- 2. Test report on corrosion resistance (salt spray fog) for 5/16" Hex Drive Concrete Screws per ASTM G 85, Annex 5 and TAS 114, Appendix E, prepared by Blackwater Testing, Inc., Test Report No. BT-CON-14-009B, dated 10/31/2014, signed and sealed by Yamil G. Kuri, P.E.

C. CALCULATIONS

1. Concrete anchor evaluation prepared by Engineering Express, dated 01/30/2015, signed and sealed by Frank L. Bennardo, P.E.

D. MATERIAL CERTIFICATIONS

1. None.

E. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER)

F. STATEMENTS

- 1. Statement letter of code conformance to the 2010 and 5th edition (2014) FBC issued by Engineering Express, dated 01/27/2015, signed and sealed by Frank L. Bennardo, P.E.
- 2. Statement letter of no financial interest issued by Engineering Express, dated 01/30/2015, signed and sealed by Frank L. Bennardo, P.E.

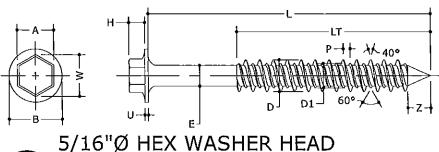
Carlos M. Utrera, P.E.
Product Control Examiner
NOA No 15-0209.06
Expiration Date: April 23, 2020

Approval Date: April 23, 2020

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METRO SCREWS

CONCRETE & MASONRY ANCHOR

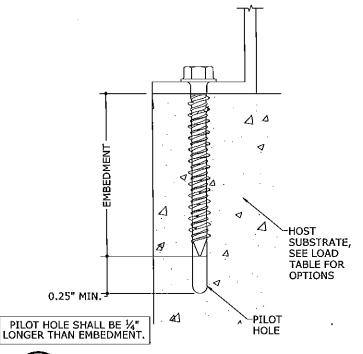


HI/LOW THREAD NAIL POINT

ALLOWABLE LOAD CAPACITIES:

| SIZE (IN) | Α | W | В | 0 | Н | E | ۵ | D1 |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|
| 5/16-14 | 0.312 | MIN | 0.551 | 0.059 | 0.155 | 0.232 | 0.311 | 0.250 |
| | 0.305 | 0.340 | 0.520 | 0.047 | 0.139 | 0.228 | 0.295 | |

| NOMINA | L LENGTH (L) | LT | | |
|--------|---------------|----------------|--|--|
| 2-3/4" | +/- 0.0299 in | 1.97 ~ 2.05 in | | |
| 3-1/4" | +/- 0.0299 in | 2.56 ~ 2.64 in | | |
| 4" | +/- 0.0492 in | 2.32 ~ 2.40 in | | |
| 5" | +/- 0.0591 in | 2.32 ~ 2.40 in | | |



| HOST SUBSTRATE | MIN. EDGE DISTANCE (in) | MIN. SPACING (in) | EMBEDMENT (in) | TENSION (LB) | SHEAR (LB) | |
|---------------------------------|-------------------------|-------------------|----------------|--------------|------------|----|
| GROUT FILLED BLOCK (3010 PSI | 2 | 5-1/4 | 1-3/4 | 225 | 197 | |
| | 2 | 6-3/8 | 2-1/8 | 279 | 231 -292 | or |
| GROUT MIN.) | 2 | 6-15/16 | 2-5/16 | 288 | 231 | |
| | 2 | 5-1/4 | 1-3/4 | 441 | 291 | 1 |
| CONCRETE (3060 PSI) | 2 | 6-3/8 | 2-1/8 | 630 | 514 | |
| | 2 | 6-15/16 | 2-5/16 | 659 | 537 | |

SIDE VIEW

1, PILOT HOLE SHALL BE 0.25" LONGER THAN EMBEDMENT WITH 0.25" DIAMETER

2. ALLOWABLE LOADS ARE BASED ON AVERAGE ULTIMATE TEST LOAD DIVIDED BY 4 (CONCRETE) OR 5 (GROUT

3. MINIMUM SPACING SHALL NOT BE LESS THAN 3*EMBEDMENT. LINEAR INTERPOLATION ALLOWED FOR EMBEDMENT ONLY

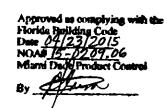
GENERAL NOTES:

TYPICAL SECTION

- THIS PRODUCT HAS BEEN DESIGNED & TESTED IN ACCORDANCE WITH THE 2010 FLORIDA BUILDING CODE AND THE FBC FIFTH EDITION (2014) FOR USE WITHIN AND OUTSIDE THE HIGH VELOCITY HURRICANE ZONE.
- 2. CONCRETE SHALL CONFORM TO ACI 301 SPECIFICATIONS, WITH STRENGTH PROPERTIES AS SPECIFIED HEREIN. GROUT-FILLED CONCRETE BLOCK SHALL CONFORM TO ASTM C-90 WITH 3010 PSI
- 3. ALLOWABLE LOAD SHOWN=ULTIMATE LOAD DIVIDED BY 4.0 FOR SOLID NON-CRAKCED CONCRETE SUBSTRATES, 5.0 FOR GROUT FILLED BLOCK SUBSTRATES. NO ALLOWABLE STRESS INCREASE HAS BEEN USED IN PREPARATION OF THIS DOCUMENT. THIS DOCUMENT DOES NOT CERTIFY SHIMMING OF ANCHOR HEADS OR COMBINED BENDING AND SHEAR STRESSES.

 4. ANCHOR MATERIAL SHALL BE SAE C 1022 STEEL AND SHALL HAVE A YIELD STRENGTH Fy=48 KSI, ANCHOR ULTIMATE STRENGTH Fu=80 KSI. CASE HARDNESS HV 550 MIN (HRC 52). CASE DEPTH
- 0.13-0.28mm.
- ANCHOR EDGE DISTANCES, EMBEDMENTS, AND SPACINGS BELOW THOSE SHOWN IN DESIGN TABLES HEREIN ARE NOT ACCEPTABLE.
- ALLOWABLE LOAD CAPACITIES TO SUBSTRATES THAT ARE NOT SHOWN IN THE DESIGN TABLES LISTED HEREIN ARE OUTSIDE THE SCOPE OF THIS CERTIFICATION AND SHALL BE DETERMINED BY A LICENSED PROFESSIONAL ENGINEER.
- 7. ANCHOR INSTALLATION SHALL BE MADE IN ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS AND THIS MIAMI-DADE COUNTY, NOTICE OF ACCEPTANCE.
- DRILL HOLES AT LEAST ½" DEEPER THAN THE ANCHOR EMBEDMENT, DIAMETER CORRESPONDING TO FASTENER DIAMETER. CLEAN HOLES OF DEBRIS AND DUST BEFORE INSTALLATION OF ANCHOR,
- ANCHORS SHALL NOT BE INSTALLED BEFORE THE CONCRETE HAS DEVELOPED ITS DESIGN STRENGTH. ANCHORS SHALL NOT BE INSTALLED IN CRACKED CONCRETED SUBSTRATES, AS DEFINED IN ACI 355.2.
- ANCHOR VALUES LISTED HEREIN ARE DETERMINED THROUGH TESTING REPORT DATA AND CHECKED FOR CONSISTENCY WITH EACH TEST PERFORMED.
- REFERENCE THE FOLLOWING TEST REPORT/S:

BLACKWATER TESTING, INC. #BT-CON-14-009A (10/02/2014)



SYSTEMS, GLASS : CONTINENTAL

OPYRIGHT ENGINEERING EXPRESS 14-2072

CALE: SEE DETAILS 01

PAGE DESCRIPTION: